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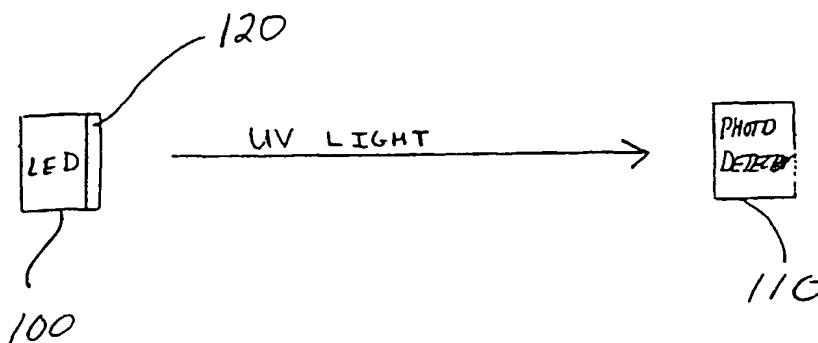
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(54) Title: METHODS AND APPARATUS FOR COMMUNICATION USING UV LIGHT



(57) Abstract: Communication methods and apparatus using ultraviolet (UV) light are provided. Safe UV communication devices, including remote control units, can use highly efficient UV LEDs and very low-noise UV photodetectors. In some cases, the LEDs emit light at wavelengths below 400 nm, below 320 nm, or even below 280 nm. In one embodiment, communication can be achieved using an LED that emits less than about 1 picowatt of UV energy at a photodetector distance of up to at least about 10 meters. Longer range communication can also be achieved at higher power levels. Photodetectors having very low dark currents at room temperature, such as below about 1×10^{-9} A/m², or even below about 1×10^{-12} A/m², are preferable.